

# Super Flush

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Date of issue: 05/08/2015

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Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : Super Flush  
Product code : 69994/419955/4199558

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Compressor flush fluid

#### 1.3. Details of the supplier of the safety data sheet

First City Chemical Inc.  
2217 Santa Anna Ave.  
Dallas, Texas 75228  
T +1 (972) 480-8606

#### 1.4. Emergency telephone number

Emergency number : +1 (800) 727-2979

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flammable Liquid 2  
Skin Irritation 2  
Eye Irritation 2A  
Specific Target Organ Toxicity – Single Exposure 3  
Aspiration Toxicity 1

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS02

GHS07

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

Precautionary statements (GHS-US) :

Keep away from heat/sparks/open flames/hot surfaces.– No smoking. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/eye protection/face protection. Wash hands thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### 2.3. Other hazards

No additional information available.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable.

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable.

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
n-Heptane	(CAS No) 142-82-5	60 - 100	Flam. Liq. 2 Skin Irrit. 2 STOT SE 3 Asp. Tox. 1
Isopropyl alcohol	(CAS No) 67-63-0	15 - 40	Flam. Liq. 2 Eye Irrit. 2A STOT SE 3
Benzene	(CAS No) 71-43-2	< 0.1	Flam. Liq. 2 Acute Tox. 4 (Oral) Skin Irrit. 2 Eye Irrit. 2A Muta. 1B Carc. 1A STOT RE 1 Asp. Tox. 1
Ethylbenzene	(CAS No) 100-41-4	< 0.1	Flam. Liq. 2 Acute Tox. 4 (Inhalation) Carc. 2 Asp. Tox. 1
Naphthalene	(CAS No) 91-20-3	< 0.1	Acute Tox. 4 (Oral) Carc. 2

\* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation. May cause drowsiness or dizziness.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapor. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Products of combustion may include, and are not limited to: oxides of carbon.
- Explosion hazard : May form flammable/explosive vapor-air mixture.

#### 5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Use only non-sparking tools. Eliminate sources of ignition.

#### 6.2. Methods and material for containment and cleaning up

For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Scoop up material and place in a disposal container. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Provide ventilation.

#### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Avoid contact with skin and eyes. Avoid breathing fume, gas, mist, spray, vapors. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only non-sparking tools. Use only outdoors or in a well-ventilated area.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep locked up and out of reach of children. Keep container tightly closed and in a well-ventilated place. Keep cool.

#### 7.3. Specific end use(s)

Not available.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>n-Heptane (142-82-5)</b>		
ACGIH	ACGIH TWA (ppm)	400 ppm
ACGIH	ACGIH STEL (ppm)	500 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2000 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	500 ppm

<b>Isopropyl alcohol (67-63-0)</b>		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	400 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	400 ppm

<b>Benzene (71-43-2)</b>		
ACGIH	ACGIH TWA (ppm)	0.5 ppm
ACGIH	ACGIH STEL (ppm)	2.5 ppm
OSHA	OSHA PEL (TWA) (ppm)	10 ppm (applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028) 1 ppm
OSHA	OSHA PEL (STEL) (ppm)	5 ppm (see 29 CFR 1910.1028)
OSHA	OSHA PEL (Ceiling) (ppm)	25 ppm

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Ethylbenzene (100-41-4)		
ACGIH	ACGIH TWA (ppm)	20 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	100 ppm

Naphthalene (91-20-3)		
ACGIH	ACGIH TWA (ppm)	10 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	10 ppm

### 8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear suitable gloves.
Eye protection	: Wear eye protection.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear
Colour	: Water white
Odour	: Alcohol
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 80 °C (177 °F)
Flash point	: -6 °C (20 °F) TCC (Lowest component)
Relative evaporation rate (butylacetate=1)	: 2.4
Flammability (solid, gas)	: Flammable
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: 45.8 mm Hg @ 20 C (68 °F)
Relative density	: 0.728
Relative vapour density at 20 °C (air=1)	: 2.8
Solubility	: Miscible
Partition coefficient: n-octanol/water	: No data available
Log Kow	: No data available
Auto-ignition temperature	: 293 °C (560 °F)
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

VOC content	: 100 % / 727.5 g/L / 6.06 lbs/gal
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under normal storage conditions. May form flammable/explosive vapor-air mixture.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition.

#### 10.5. Incompatible materials

Oxidizers.

#### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified.

Super Flush	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 20 mg/l/4h
n-Heptane (142-82-5)	
LD50 oral mouse	5000 mg/kg
LD50 dermal rabbit	3000 mg/kg
LC50 inhalation rat	103 g/m <sup>3</sup> /4h
Isopropyl alcohol (67-63-0)	
LD50 oral rat	5045 mg/kg
LD50 dermal rabbit	12800 mg/kg
LC50 inhalation rat	72600 mg/m <sup>3</sup> /4h
Benzene (71-43-2)	
LD50 oral rat	930 mg/kg
LD50 dermal rabbit	> 9.4 ml/kg
LC50 inhalation rat	10305-14380 ppm/4h
Ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	15400 mg/kg
LC50 inhalation rat	17.2 mg/l/4h
Naphthalene (91-20-3)	
LD50 oral rat	490 mg/kg
LD50 dermal rabbit	> 20 g/kg

Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitisation : Based on available data, the classification criteria are not met.  
Germ cell mutagenicity : Based on available data, the classification criteria are not met.  
Carcinogenicity : Based on available data, the classification criteria are not met.

Isopropyl alcohol (67-63-0)	
IARC group	3 - Not classifiable

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<b>Benzene (71-43-2)</b>	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 2 - Known Human Carcinogens
In OSHA Specifically Regulated Carcinogen list	Yes

<b>Ethylbenzene (100-41-4)</b>	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity

<b>Naphthalene (91-20-3)</b>	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen

Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

### 12.2. Persistence and degradability

<b>Super Flush</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Super Flush</b>	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

No additional information available.

### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.
Additional information	: Handle empty containers with care because residual vapours are flammable. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT	
UN-No.(DOT)	: UN1993
Proper Shipping Name (DOT)	: Flammable liquids, n.o.s. (Heptane, Isopropyl alcohol). Marine pollutant.
Department of Transportation (DOT) Hazard Classes	: 3

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Hazard labels (DOT) :



Packing group (DOT) :

II

Marine pollutant :

Yes

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

##### **n-Heptane (142-82-5)**

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
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##### **Isopropyl alcohol (67-63-0)**

Listed on United States SARA Section 313

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
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SARA Section 313 - Emission Reporting	1.0 % (only if manufactured by the strong acid process, no supplier notification)
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##### **Benzene (71-43-2)**

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting	0.1 %
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##### **Ethylbenzene (100-41-4)**

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting	0.1 %
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##### **Naphthalene (91-20-3)**

Listed on United States SARA Section 313

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
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SARA Section 313 - Emission Reporting	0.1 %
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#### 15.2. US State regulations

##### **Super Flush**

State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
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### SECTION 16: Other information

Date of issue : 05/08/2015

Other information : None.

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